

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/804,966	03/19/2004	Roger Sidey	P/7239	7879	
23334 7	23334 7590 04/15/2005			EXAMINER	
FLEIT, KAIN, GIBBONS, GUTMAN, BONGINI & BIANCO P.L. ONE BOCA COMMERCE CENTER 551 NORTHWEST 77TH STREET, SUITE 111 BOCA RATON, FL 33487			RO, BENTSU		
			ART UNIT	PAPER NUMBER	
			2837		
			DATE MAILED: 04/15/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

15	Application No.	Applicant(s)				
	10/804,966	SIDEY, ROGER				
Office Action Summary	Examiner	Art Unit				
	Bentsu Ro	2837				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply signified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on						
2a) This action is <b>FINAL</b> . 2b) ☑ This						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-12</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>5-8</u> is/are allowed.						
6)⊠ Claim(s) <u>1-4 and 9-12</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>19 March 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) ☐ Interview Summary Paper No(s)/Mail D					
<ol> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)         Paper No(s)/Mail Date     </li> </ol>		Patent Application (PTO-152)				

Application/Control Number: 10/804,966

Art Unit: 2837

## FIRST OFFICE ACTION

- 1. Claim 5, line 14, at the end of this line, change the period (.) to a comma (,) or a semi-colon (;). Line 19, delete the first word "so".
- The following is a quotation of the appropriate paragraphs of 35
   U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4 and 9-12 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Salama US Patent No. 6,801,441.

Salama's Fig. 10 circuit is identical to applicant's Fig. 2 circuit, therefore, the claimed subject matter should be the same as that of Salama's teaching.

With respect to independent claims 1 and 9, Salama Fig. 10 shows a rectifier bridge 20 and an inverter 21. The inverter 21 is connected to the rectifier bridge 20 directly, namely, there is no intermediate inductor or capacitor. The rectifier bridge 20 is a bi-directional bridge in that the forward rectification is switchable by semiconductor switches V1-V6, and the regenerative current flows through the reversed diode rectifier D1-D6.

Application/Control Number: 10/804,966

Art Unit: 2837

With respect to claims 2 and 10, because the rectifier bridge 20 and the inverter 21 are connected directly, and there is no inductor or capacitor connected in-between, thus, the ac load (motor 22) receives the same frequency and amplitude of the ac supply.

With respect to claims 3 and 11, the rectifier circuit 20 (and all rectifier circuits) will never reverse the polarity of its output.

With respect to claims 4 and 12, because the rectifier circuit 20 and the inverter circuit 21 are connected directly, the motor must commutate in synchronization with the frequency of the rectified voltage. If not, then motor will vibrate because the reversing current generated by the motor will flow from the motor to the inverter 21 to the rectifier 20.

- 4. Claims 5-8 are allowable because Salama does not teach a "close to unity power factor".
- The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 6. Any inquiry concerning this communication should be directed to Bentsu Ro at telephone number 571 272-2072.

4/13/2005

Bentsu Ro Senior Examiner Art Unit 2837